

Docket No.: 0425-0821P  
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:  
Tadayuki SUZUKI et al.

Application No.: 09/744,678

Confirmation No.: 003254

Filed: April 10, 2001

Art Unit: 1616

For: FRESHNESS-KEEPING AGENT FOR  
PLANTS

Examiner: A. N. Pryor

DECLARATION UNDER 37 C.F.R. § 1.132

MS Amendment;  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Tadayuki SUZUKI, do declare and say as follows:

1. I am a co-inventor of above-identified application.
2. I have read the Final Office Action dated January 22, 2007 in the above-identified application and understand its contents.
3. As a co-inventor, I have read and understand the current set of claims and the present specification of the above-identified application.
4. I have carried out additional tests and procedures, and thus obtained results of which are described below. Additional examples and comparative examples were carried out that are similar to Example 2 of the instant application, as well as being the same way as shown in the Declaration (under 37 C.F.R. § 1.132) previously filed on March 28, 2002 (signed by

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Declarant on March 11, 2002), except the effective component (A) is as shown in the Tables below.

5. The test component (A) is the sugar-based fatty acid amide, as disclosed in the specification of the present application at page 16, and is tested with one of each of the components (B)-(F). It is noted that the experimental results due to the combination of (A) with one of (B)-(F) according to the claimed invention is superior and unexpected.

**Table 1: Combination of (A) amide with (B) sugar**

### **The number of days for rose being preserved**

		Concentration of Sugar-based fatty acid amide (% by weight)				
		0	0.0001	0.001	0.01	0.1
Concentration of the sucrose (% by weight)	0	3	3	4	4	3
	0.1	3	7	7	8	7
	0.5	4	8	8	9	8
	1	5	8	10	10	9
	2	5	9	12	11	10
	5	5	9	11	11	9
	10	3	8	10	9	8

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**Table 2: Combination of (A) amide with (C) plant hormone.**

### **The number of days for rose being preserved**

		Concentration of Sugar-based fatty acid amide (% by weight)				
		0	0.0001	0.001	0.01	0.1
Concentration of the glycerolin (GAS) (% by weight)	0	3	3	4	4	3
	0.00001	3	7	8	9	9
	0.0001	3	8	9	9	9
	0.001	4	9	10	10	8
	0.01	2	8	9	9	7
	0.1	1	7	8	8	7
	0.5	1	7	7	7	7

**Table 3: Combination of (A) amide with (D) ageing inhibitor**

### **The number of days for rose being preserved**

		Concentration of Sugar-based fatty acid amide (% by weight)				
		0	0.0001	0.001	0.01	0.1
Concentration of the silver thiosulfate (% by weight)	0	3	3	4	4	3
	0.0001	3	7	8	9	7
	0.001	5	9	9	10	8
	0.01	5	10	11	10	8
	0.1	4	10	10	9	8
	0.5	3	7	8	8	7

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**Table 4: Combination of (A) amide with (E) colloid-aggregating agent**

### **The number of days for rose being preserved**

		Concentration of Sugar-based fatty acid amide (% by weight)				
		0	0.0001	0.001	0.01	0.1
Concentration of the aluminum sulfate 13-14H <sub>2</sub> O (% by weight)	0	3	3	4	4	3
	0.0001	3	8	9	9	8
	0.001	4	8	10	10	9
	0.01	5	9	11	11	9
	0.1	4	9	11	10	9
	0.5	2	8	10	9	8

**Table 5: Combination of (A) amide with (F) preservative**

### **The number of days for rots being preserved**

		Concentration of Sugar-based fatty acid amide (% by weight)					
		0	0.0001	0.001	0.01	0.1	
Concentration of the Proxel (% by weight)	0	3	3	4	4	3	
	0.0001	3	7	8	8	7	
	0.001	3	9	9	8	8	
	0.01	4	9	9	10	8	
	0.1	2	9	10	9	8	
	0.5	1	7	8	8	7	
	1	1	7	8	8	7	

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6. I hereby declare that all statements made herein of my own knowledge are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: June 20, 2007

By: Tadayuki Suzuki  
Tadayuki SUZUKI  
Employee of  
**KAO CORPORATION**

Table 24

Comparative product	Invertive product	Plant hormone (C)	Surfactant (A)	The number of days for the flowers being preserved		
				chrysanthemum	carnation	rose
Glyceraldehyde 2% (GA3) 1ppm		Decyl polyglucoside 1ppm		11	11	10
Glyceraldehyde 2% (GA3) 1ppm		Decyl polyglucoside 10ppm		12	12	12
Glyceraldehyde 2% (GA3) 1ppm		Decyl polyglucoside 100ppm		11	12	12
Glyceraldehyde 2% (GA3) 1ppm		Sucrose fatty acid ester 1ppm		11	11	10
Glyceraldehyde 2% (GA3) 1ppm		Sucrose fatty acid ester 10ppm		12	12	10
Glyceraldehyde 2% (GA3) 1ppm		Sucrose fatty acid ester 100ppm		11	10	9
Glyceraldehyde 2% (GA3) 1ppm		Sorbitan fatty acid ester 1ppm		11	11	11
Glyceraldehyde 2% (GA3) 1ppm		Sorbitan fatty acid ester 10ppm		12	12	11
Glyceraldehyde 2% (GA3) 1ppm		Sorbitan fatty acid ester 100ppm		11	11	9
Glyceraldehyde 2% (GA3) 1ppm		Sugar-based fatty acid amide 1ppm		10	9	9
Glyceraldehyde 2% (GA3) 1ppm		Sugar-based fatty acid amide 10ppm		10	10	10
Glyceraldehyde 2% (GA3) 1ppm		Sugar-based fatty acid amide 100ppm		11	10	10
Kinetin 1ppm		Sorbitan fatty acid ester 10ppm		9	9	8
2,4-D 10ppm		Sorbitan fatty acid ester 10ppm		8	8	8
Tap water				5	5	3
Chrysal 2%				7	7	5
Glyceraldehyde 2% (GA3) 1ppm				4	4	3
Kinetin 1ppm				4	4	3
2,4-D 10ppm				3	3	3
		Decyl polyglucoside 10ppm		5	5	4
		Sucrose fatty acid ester 10ppm		5	5	4
		Sorbitan fatty acid ester 10ppm		5	5	4
		Sugar-based fatty acid amide 10ppm		5	4	4

Table 25

Germicide,fungicide and preservative (F)		Surfactant (A)	The number of days for the flowers being preserved		
			chrysanthemum	carnation	rose
	Proxel 200ppm	Decyl polyglucoside 1ppm	9	9	8
	Proxel 200ppm	Decyl polyglucoside 10ppm	10	10	9
	Proxel 200ppm	Decyl polyglucoside 100ppm	10	10	9
	Proxel 200ppm	Sucrose fatty acid ester 1ppm	9	9	8
	Proxel 200ppm	Sucrose fatty acid ester 10ppm	10	10	9
	Proxel 200ppm	Sucrose fatty acid ester 100ppm	9	9	9
	Proxel 200ppm	Sorbitan fatty acid ester 1ppm	10	10	9
	Proxel 200ppm	Sorbitan fatty acid ester 10ppm	11	10	10
	Proxel 200ppm	Sorbitan fatty acid ester 100ppm	10	10	9
	Proxel 200ppm	Sugar-based fatty acid amide 1ppm	10	9	9
	Proxel 200ppm	Sugar-based fatty acid amide 10ppm	10	10	9
	Proxel 200ppm	Sugar-based fatty acid amide 100ppm	11	10	10
	8-hydroxyquinoline 500ppm	Sorbitan fatty acid ester 10ppm	9	10	9
Didecyldimethyl ammonium chloride 5ppm		Sorbitan fatty acid ester 10ppm	8	8	8
	Tap water		5	5	3
	Chrysal 2%		7	7	5
	Proxel 200ppm		5	4	4
	8-hydroxyquinoline 500ppm		4	4	3
Didecyldimethyl ammonium chloride 5ppm			4	4	3
	Decyl polyglucoside 10ppm		5	5	4
	Sucrose fatty acid ester 10ppm		5	5	4
	Sorbitan fatty acid ester 10ppm		5	5	4
	Sugar-based fatty acid amide 10ppm		5	4	4